

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Listing of Claims:

1. (Previously Presented) A code division, multiple access (CDMA) receiver, comprising:

a RF section for receiving a CDMA signal;

a circuit for determining an instantaneous total received power (I_o) of the received CDMA signal; and

a searcher that is one of enabled for operation or disabled from operation in accordance with the value of I_o .

2. (Original) A CDMA receiver as in claim 1, wherein said circuit comprises a comparator for comparing I_o against a threshold, and for generating a searcher trigger signal only when I_o exceeds the threshold.

3. (Original) A CDMA receiver as in claim 1, wherein said circuit comprises a comparator for comparing I_o against a threshold, and for generating a searcher trigger signal when I_o exceeds the threshold, or if I_o does not exceed the threshold, for generating the searcher trigger signal within some predetermined period of time.

4. (Currently Amended) A CDMA receiver as in claim 1, wherein said searcher comprises a searcher buffer for storing Inphase and Quadrature (I/Q) samples, and wherein said searcher is responsive to a trigger signal generated by said circuit for storing I/Q samples into said searcher buffer.

5. (Original) A CDMA receiver as in claim 1, wherein said circuit operates to accumulate n symbol power samples, to scale the n accumulated symbol power samples, and to compare the scaled symbol power samples to a reference value.

6. (Original) A CDMA receiver as in claim 5, wherein said circuit further operates, if the scaled symbol power value is above the reference value, to generate a trigger for the searcher to cause the searcher to begin storing Inphase and Quadrature (I/Q) samples into a searcher buffer.

7. (Original) A CDMA receiver as in claim 6, wherein said circuit further operates, if the scaled symbol power value is below the reference value, to repeat accumulating, scaling and comparing the signal power samples, and if the scaled symbol power value does not exceed the reference value after x iterations, to generate the trigger for the searcher to cause the searcher to begin storing I/Q samples into the searcher buffer for processing the data for acquisition or set maintenance purposes.

8. (Original) A CDMA receiver as in claim 1, wherein the value of I_o is computed over numbers of samples that are less than the total size of a searcher sample buffer, and is used to select samples from only a portion of the searcher sample buffer for use by the searcher.

9. (Original) A method for operating a code division, multiple access (CDMA) receiver, comprising:

receiving a CDMA signal;

determining an instantaneous total received power (I_o) of the received CDMA signal; and

enabling or disabling a searcher for operation in accordance with the value of I_o .

10. (Original) A method as in claim 9, wherein determining the instantaneous total received power comprises comparing I_o against a threshold, and generating a searcher trigger

signal only when I_o exceeds the threshold.

11. (Original) A method as in claim 9, wherein determining the instantaneous total received power comprises comparing I_o against a threshold, and generating a searcher trigger signal only when I_o exceeds the threshold, or if I_o does not exceed the threshold, generating the searcher trigger signal within some predetermined period of time.

12. (Original) A method as in claim 9, wherein the searcher includes a buffer for storing Inphase and Quadrature (I/Q) samples, and further comprising storing I/Q samples into the buffer in response to a trigger signal generated when I_o exceeds a threshold, or if I_o does not exceed the threshold, to a trigger signal generated within some predetermined period of time.

13. (Original) A method as in claim 9, wherein said method operates to accumulate n symbol power samples, to scale the n accumulated symbol power samples, to compare the scaled symbol power samples to a reference value, and if the scaled symbol power value is above the reference value, to generate a trigger to begin storing Inphase and Quadrature (I/Q) samples into a searcher buffer, wherein said method further operates, if the scaled symbol power value is below the reference value, to repeat accumulating, scaling and comparing the signal power samples, and if the scaled symbol power value does not exceed the reference value after x repetitions, to generate the trigger for the searcher to cause the searcher to begin storing I/Q samples into the searcher buffer.

14. (Original) A method as in claim 9, wherein the value of I_o is determined over a number of samples that is less than the total size of a searcher sample buffer, and is used to select samples from only a portion of the searcher sample buffer for use by the searcher.

15. (Currently Amended) A method for operating a code division, multiple access (CDMA) receiver, comprising:

receiving a CDMA signal;

storing samples of the received CDMA signal into a buffer;

determining an instantaneous total received power (I_o) of the received CDMA signal over m consecutive segments of the received CDMA signal; and

using a maximum value of I_o to identify one of m segments of the ~~searcher~~ buffer on which a searcher is to be enabled for operation.

16. (Previously Presented) A method for operating a code division, multiple access (CDMA) receiver, comprising:

receiving a CDMA signal and storing samples of the received CDMA signal into a buffer of a searcher while determining an instantaneous total received power (I_o) of the received CDMA signal; and

selectively one of generating or not generating a trigger signal to the searcher in accordance with the value of I_o , wherein when generated the searcher trigger signal causes the searcher to process the stored samples.

17. (Original) A method as in claim 16, wherein determining the instantaneous total received power comprises comparing I_o against a threshold, and generating the searcher trigger signal only when I_o exceeds the threshold.

18. (Original) A method as in claim 16, wherein determining the instantaneous total received power comprises comparing I_o against a threshold, and generating the searcher trigger signal only when I_o exceeds the threshold, or if I_o does not exceed the threshold, generating the searcher trigger signal within some predetermined period of time.

19. (Original) A method as in claim 16, wherein the searcher buffer stores Inphase and

Quadrature (I/Q) samples.

20. (Original) A method as in claim 16, wherein said method operates to accumulate n symbol power samples, to scale the n accumulated symbol power samples, to compare the scaled symbol power samples to a reference value, and if the scaled symbol power value is above the reference value, to generate the searcher trigger signal, wherein said method further operates, if the scaled symbol power value is below the reference value, to repeat accumulating, scaling and comparing the signal power samples, and if the scaled symbol power value does not exceed the reference value after some period of time, to generate the searcher trigger signal.

21. (Previously Presented) A code division, multiple access (CDMA) receiver, comprising:

a receiver circuit for receiving a CDMA signal;

a memory for storing samples of the received CDMA signal; and

a signal processor circuit for determining, during a time that the samples are being stored in said memory, an instantaneous total received power (I_o) of the received CDMA signal for selectively one of generating or not generating a searcher trigger signal in accordance with the value of I_o , wherein when generated the searcher trigger signal causes the searcher to process the stored samples.

22. (Original) A CDMA receiver as in claim 21, wherein said signal processor circuit, when determining the instantaneous total received power, compares I_o against a threshold, and generates the searcher trigger signal only when I_o exceeds the threshold.

23. (Currently Amended) A CDMA receiver as in claim 21, wherein said signal processor circuit, when determining the instantaneous total received power, compares I_o against a threshold, and generates the searcher trigger signal ~~only~~ when I_o exceeds the threshold, or if I_o

does not exceed the threshold, generates the searcher trigger signal within some predetermined period of time.

24. (Original) A CDMA receiver as in claim 21, wherein said memory stores Inphase and Quadrature (I/Q) samples.

25. (Original) A CDMA receiver as in claim 21, wherein said signal processor circuit operates to accumulate n symbol power samples, to scale the n accumulated symbol power samples, to compare the scaled symbol power samples to a reference value, and if the scaled symbol power value is above the reference value, generates the searcher trigger signal, wherein if the scaled symbol power value is below the reference value, said signal processor circuit repeats accumulating, scaling and comparing the signal power samples, and if the scaled symbol power value does not exceed the reference value after some period of time, generates the searcher trigger signal.

26. (Previously Presented) A radio frequency (RF) receiver, comprising:

means for receiving a RF signal;

means for determining an instantaneous total received power (I_o) of the received RF signal; and

means for one of enabling a searcher means for operation or disabling the searcher means from operation in accordance with the value of I_o .

27. (Previously Presented) A RF receiver as in claim 26, where said enabling means comprises comparator means for comparing I_o against a threshold, and for generating a searcher means trigger signal only when I_o exceeds the threshold.

28. (Previously Presented) A RF receiver as in claim 27, where said enabling means is

responsive to I_o not exceeding the threshold within some predetermined period of time, for generating the searcher means trigger signal.

29. (Previously Presented) A RF receiver as in claim 26, where the value of I_o is determined over numbers of samples that are less than a total size of a searcher means sample buffer means, and further comprising means to select samples from only a portion of the sample buffer means for use by the searcher means.

30. (Previously Presented) A method for operating a radio frequency (RF) receiver, comprising:

a step for receiving a RF signal;

a step for determining an instantaneous total received power (I_o) of the received RF signal; and

a step for selectively one of enabling or disabling a searcher for operation in accordance with the value of I_o .

31. (Previously Presented) A method as in claim 30, where the step for determining the instantaneous total received power comprises comparing I_o against a threshold, and generating a searcher trigger signal only when I_o exceeds the threshold.

32. (Previously Presented) A method as in claim 31, where the step for determining the instantaneous total received power further comprises, if I_o does not exceed the threshold within some predetermined period of time, a step for generating the searcher trigger signal.

33. (Previously Presented) A method as claim 30, where the step for determining the instantaneous total received power determines the value of I_o over numbers of samples that are less than a total size of a sample buffer, and further comprising a step for selecting samples from

S.N.: 09/893,143
Art Unit: 2611

only a portion of the sample buffer for use by the searcher.